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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/446,958	08/07/2000	PIERRE M. COMBELLES	9320.92USWO	3201

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EXAMINER

LIU, SHUWANG

ART UNIT	PAPER NUMBER
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2634

DATE MAILED: 03/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/446,958

Applicant(s)

COMBELLES ET AL.

Examiner

Shuwang Liu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08/07/2000 (the preliminary amendment).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 16-19 is/are rejected.
- 7) ☒ Claim(s) 11-15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. Two references listed in the form (PTO-1449) of the information disclosure statement filed on February 29, 2000, has not been considered because there are no date or/and author for the references.

Specification

2. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

Claim Objections

3. Claim 1-8, 11-15 and 19 are objected to because

(1) the elements of the method claim are not recited as steps. The elements of a method claim are steps, which should usually be verbal phrases introduced by a gerund or verbal noun (the "-ing" form of a verb). For example, on line 11, claim 1, "the obtaining" should be - -obtaining- -, and on line 21, claim 1, "transmission" should be - -transmitting- -;

(2) in line 1, claim 1, "Method for the modulation of" should be - - A method for modulating- -. Corresponding changes should be made for other claims;

(3) insert - -and- - between the last two method steps or means for all of the claims;

(4) give a definition for "L";

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- (5) "characterized in that" is suggested changing to "comprising";
 - (6) in line 2, claim 4, "the generation" should be - -a generation- -;
 - (7) on line 1, claims 9, "Device for the modulation of" should be - -A device for modulating- -;
 - (8) delete "the" after "means for" for all of apparatus claims;
 - (9) in lines 11 and 14, insert - -;- - at end of the sentence;
 - (10) in line 6, claim 10, insert - -storage means including" before "2LM-M";
 - (11) in line 1, claim 11, "Method for the demodulation of" should be - - A method for demodulating- -. Corresponding changes should be made for other claims;
 - (12) in line 17, claim 11, change "2l-1" to - -2L-1- -; and
 - (13) in line 3, insert - -output- - after "M complex '.
- Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1- 8 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the weighting coefficients" in line 14 and "said storage locations" in line 19. There is insufficient antecedent basis for this limitation in

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the claim. For example, it is unclear whether "said storage locations" refers to "predetermined storage locations" in line 16 or "2LM storage locations" in line 17.

Claim 9 recites the limitation "said temporary storage locations" in line 16. There is insufficient antecedent basis for this limitation in the claim since it is not introduced before.

Claim 16 recites the limitation "said memorized samples" in line 14. There is insufficient antecedent basis for this limitation in the claim since it is not introduced before.

Claim 19 recites the limitation "said 2M complex coefficients" in line 7, "the weighted values" in line 11, and "said memory locations" in line 13. There is insufficient antecedent basis for these limitations in the claim. For example, it is unclear whether "said memory locations" refers to "predetermined memory locations" in line 11 or "2ML memory locations" in line 12.

Allowable Subject Matter

6. Claims 11-15 would be allowable if rewritten to overcome the objections, set forth in this Office action.

7. Claims 1-10 and 16-19 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph and the objections, set forth in this Office action.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shuwang Liu whose telephone number is (703) 308-9556.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin, can be reached at (703) 305-4714.

Any response to this action should be mailed to:

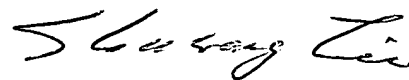
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or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.



Shuwang Liu
Primary Examiner
Art Unit 2634

March 21, 2003